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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,024	01/23/2001	Robert Harcourt	8008	9339

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WOODLING, KROST AND RUST
9213 Chillicothe Road
Kirtland, OH 44094

EXAMINER

ROSSI, JESSICA

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 12/02/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

AS 9

Office Action Summary	Application No.	Applicant(s)	
	09/768,024	HARCOURT, ROBERT	
	Examiner	Art Unit	
	Jessica L. Rossi	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/15/02, Election, paper no. 7.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 5,6,8,10,14-16,21-24,31,37 and 43-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,9,11-13,17,18,25-30,32-36 and 38-42 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 5-6, 8, 10, 14-16, 21-24, 31, 37, and 43-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Claim Objections

2. Claims 2-4, 7, 9, 17-20, 25-29, 32-36, and 38-42 are objected to because of the following informalities: insert --said-- before “hose” in line 1 of claims 2, 4, 7, 9, 18-20, 26-29, 33-36, and 39-42; delete “the” before “sealing” in lines 2 and 3 of claim 3; insert --a-- before “hose” in line 1 of claims 17, and 25.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 30 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 30 and 35, it is unclear what is meant by “the group consisting of a steam heater, an electric coil, ...or...”. Are Applicants attempting to use Markush language? If so, it is pointed out that use of the word “or” is incorrect. Applicants must amend the claims to use the word “and” (See MPEP 2173.05(h)).

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With respect to claims 32 and 38, it is unclear as to whether or not a difference exists between “continuously” and “endlessly” vulcanizing. Do Applicants mean that the process is continuous and that an endless hose can be vulcanized? If so, it is suggested to amend claim 38 to state “A process for vulcanizing an endless hose”.

Double Patenting

5. Claim 39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 40. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Please note that a non-contact heater would be a heater that is spaced apart from the hose, just as a heater spaced apart from the hose would be a non-contact heater.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 32, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Enomoto (US 5453229; provided in IDS).

With respect to claim 1, Enomoto, directed to a process for making a hose 30, teaches pressurizing an extruded rubber hose with an inert gas (column 3, lines 40-52; column 4, lines 62-63), trapping air inside the hose by clamping the forward end of the hose (column 4, line 67 – column 5, line 2), and vulcanizing the hose from the outside to the inside by passing the clamped

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hose through a heated salt bath 32 (note that reference teaches the need to only remove salt from the outer surface of the hose; Figure 4; column 6, lines 37-38 and 42-44).

Regarding claim 2, the reference teaches the hose including a woven jacket (Figure 2; column 3, lines 25-35).

With respect to claims 32 and 38, Enomoto teaches a process for continuously and endlessly vulcanizing a hose (column 7, lines 29-30) comprising pressurizing the hose from within by trapping a pressurized inert gas inside the hose (column 3, lines 50-52; column 4, lines 62 – column 5, line 2) and vulcanizing the hose from the outside-in by passing the hose through a heated salt bath (note that reference teaches the need to only remove salt from the outer surface of the hose; Figure 4; column 6, lines 37-38 and 42-44).

8. Claims 32, 35, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Torghele (US 4483815; provided in IDS).

With respect to claims 32 and 38, Torghele teaches continuously and endlessly vulcanizing a hose by pressurizing the hose from within (Figure 1; column 3, lines 50-51) and vulcanizing the hose from the outside-in (column 3, lines 23-22 and 40-43; column 4, lines 21-25 and 50-53).

Regarding claim 35, the reference teaches vulcanizing the hose by passing it through a heater 14 that is a steam heater (column 3, lines 40-43).

Cancelled
39-110 Regarding claims 38-40, the reference teaches the heater 14 being a non-contact heater that is spaced apart from the hose by tubular body 3 (Figure 1; column 3, lines 40-43).

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Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 9, 11-12, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto in view of Satzler (US 4517039).

Regarding claim 3, Enomoto teaches continuously forming the unvulcanized hose on a mandrel 11 (column 3, lines 38-49), supplying the inert gas through the mandrel to the inside of the hose (column 3, lines 50-52), removing the hose from the mandrel (column 3, lines 44-45), and sealing the hose with the mandrel at the rearward end of the hose and clamping means at the forward end (column 5, lines 1-2). The reference is silent as to the type of clamping means but teaches rollers 31 positioned downstream of the vulcanizing means 32 for drawing the vulcanized hose (Figure 4; column 6, lines 43-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the rollers of Enomoto be pinch rollers for sealing the forward end of the hose because it is known in the art to continuously vulcanize a hose by passing it through a vulcanizing bath 30 where pinch rollers 78, positioned downstream of the bath, draw the vulcanized hose, as taught by Satzler (Figure 1; column 4, lines 17-20; column 5, lines 7-13), where the pinch rollers would serve the dual purpose of sealing and drawing in the apparatus of Enomoto.

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Regarding claim 11, Enomoto in view of Satzler (see claim 3 above) teaches extruding rubber hose over the mandrel 11 (Enomoto; column 3, lines 44-47), tensioning and sealing the rubber hose (Enomoto; column 4, lines 62-64) as it is drawn through the pinch rollers (Enomoto; column 4, line 67 – column 5, line 2), and vulcanizing the hose intermediate the mandrel and the pinch rollers (Figure 4). Enomoto is silent as to the rubber hose forming a seal as the hose exits the mandrel and the hose being drawn through the pinch rollers by a haul off.

The examiner points out that Enomoto teaches extruding rubber hose over a mandrel where the extruded rubber exits the mandrel just as disclosed by Applicants in the present specification; therefore, one would appreciate that a seal would be formed just as in the present specification.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to draw the hose of Enomoto through the pinch rollers by a haul-off because Satzler teaches drawing the hose through the pinch rollers using a haul-off (column 5, lines 7-11).

Regarding claim 12, selection of a particular vulcanizing temperature would have been within purview of the skilled artisan depending on the material used.

Regarding claim 9, Enomoto teaches supplying the gas through a tube 14 in the mandrel 11 and into a cavity formed by the tube, mandrel, hose, and the rollers (Figure 2; column 3, lines 50-52; column 5, lines 35-36). Enomoto is silent as to the tube having a check valve, but the skilled artisan would appreciate that Figure 2 depicts the tube having a valve where valves are notoriously well-known means for supplying gas. The type of valve would have been within purview of the skilled artisan.

Regarding claim 34, Applicants are directed to the rejection of claim 33 in paragraph 13 below and the rejection of claim 11 above.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto and Satzler as applied to claim 11 above, and further in view of Borsvold (US 3690796).

Regarding claim 13, the skilled artisan reading the Satzler reference as a whole would have appreciated that the type of vulcanizing means is not critical to the invention; therefore, it would have been obvious to the skilled artisan to use a steam drum as an alternative to the bath of Enomoto because such is a known vulcanizing means for continuously vulcanizing a rubber hose from the outside-in, as taught by Borsvold (Figure 1; column 1, lines 61-62; column 3, lines 4-11), where only the expected results would have been achieved.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto in view of Satzler and Tanaka (US 4326905).

With respect to claim 17, Enomoto in view of Satzler teaches pressurizing the unvulcanized rubber hose with a gas, sealing the inside of the unvulcanized hose with respect to the mandrel, pulling the unvulcanized hose through a heater that vulcanizes the hose, and pinching and sealing the vulcanized hose as it is removed from the heater (see rejection of claims 1, 3, and 11 above). Enomoto teaches extruding the rubber onto the interior and exterior of the woven fabric (column 3, lines 42-46; column 4, lines 36-46) but is silent as to extruding the rubber into and through the woven fabric.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extrude the rubber of Enomoto onto, into and through the woven fabric because

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such is known in the art, as taught by Tanaka (column 7, lines 50-54 and 61-64), where this eliminates the need for two extruders.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto, Satzler, and Tanaka as applied to claim 17 above, and further in view of Torghele.

Regarding claim 18, Enomoto is silent as to how the gas is pressurized. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a gas supply cup because such is known in the art, as taught by Torghele (note reference number 4 in Figure 1; column 3, lines 49-53), where only the expected results would have been achieved.

14. Claims 33, 36, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto.

Regarding claim 33, Enomoto reference teaches supplying the gas through a tube 14 in the mandrel 11 (Figure 2; column 3, lines 50-52; column 5, lines 35-36). Enomoto is silent as to the tube having a check valve, but the skilled artisan would appreciate that Figure 2 depicts the tube having a valve where valves are notoriously well-known means for supplying gas. The type of valve would have been within purview of the skilled artisan.

Regarding claim 36, the skilled artisan would have readily appreciated that the pressurized gas serves to control the diameter of the hose.

Regarding claims 41-42, selection of a vulcanizing time and temperature would have been within purview of the skilled artisan depending on the material used.

(15.) Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (US 4488921; provided in IDS) in view of Tanaka.

*add in
Torghele for
non-contact
energy source*

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With respect to claim 1, Dougherty, directed to a process for making a hose, teaches pressurizing the hose (column 8, lines 59-62), trapping air inside the hose (column 8, lines 59-62), and vulcanizing the hose from the outside to the inside (column 8, lines 62-66). The reference teaches the hose comprising rubber layers and a woven reinforcement layer (column 4, line 67 – column 6, line 62) but is silent as to extruding the rubber layers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extrude the rubber layers onto, into and through the woven reinforcement because such is known in the art, as taught by Tanaka (column 7, lines 50-55 and 60-64), where extrusion ensures uniform coating of the reinforcement.

Regarding claim 2, Dougherty teaches the reinforcement being a woven jacket (column 6, lines 14-15 and 22).

16. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torghele in view of Tanaka and Enomoto.

With respect to claim 1, Torghele, directed to making a hose, teaches pressurizing the hose by putting pressurized air inside the hose (column 3, lines 50-51) and vulcanizing the hose from the outside-in (column 4, lines 21-25 and 50-53). The reference is silent as to extruding the hose and trapping the air inside the hose.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extrude the rubber outer layer 24 of the hose of Torghele because such is a well known technique in the art for making hose, as taught by Tanaka (column 7, lines 50-55 and 61-63), where extruding allows for uniform coating of the reinforcement layer 23 of Torghele.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to trap the air inside the hose of Torghele because it is known in the art to make a hose where pressurized gas is placed inside the hose, prior to vulcanization from the outside-in, where the gas is trapped inside the hose, as taught by Enomoto (column 4, line 62 – column 5, line 2), where this ensures that the hose maintains its tubular shape during vulcanization by preventing escape of the gas.

Regarding claim 4, Torghele teaches vulcanizing the hose with a first energy source 11 (Figure 1; column 3, lines 23-25; column 4, lines 21-25) followed by vulcanizing the hose with a steam heater 14 (Figure 1; column 3, lines 40-43; column 4, lines 50-53).

17. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torghele, Tanaka, and Enomoto as applied to claim 4 above, and further in view of Dougherty.

Regarding claim 7, Torghele is silent as to the first energy source being a hot air heater. Selection of a particular heater would have been within purview of the skilled artisan absent any unexpected results. However, it would have been obvious to use a hot air heater as an alternative to the heater of Torghele because one reading the reference as a whole would have appreciated that the type of heater is not critical to the invention and such a hot air heater for vulcanizing a hose having a pressurized gas within is known in the art, as taught by Dougherty (column 8, lines 59-66).

18. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torghele.

Regarding claims 41-42, selection of a vulcanizing time and temperature would have been within purview of the skilled artisan depending on the material used.

19. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satzler.

With respect to claim 11, Satzler, teaches making a hose by extruding rubber over a mandrel 50 (Figure 2; column 3, lines 13-15; column 5, lines 42-49; column 6, lines 17-25), tensioning the hose as it is drawn through pinch rollers 78 (column 4, line 19; column 7, lines 30-33) by haul-off means 32 (column 5, lines 8-10), and vulcanizing the hose intermediate the mandrel and pinch rollers by passing the hose through vulcanizing means 30 (Figure 1). The reference is silent as to the extruded hose forming a seal as it exits the mandrel and the pinch rollers sealing the hose.

The examiner points out that Satzler teaches extruding rubber hose over a mandrel where the extruded rubber exits the mandrel just as disclosed by Applicants in the present specification; therefore, one would appreciate that a seal would be formed just as in the present specification.

The examiner also points out that Satzler teaches drawing the hose through pinch rollers located downstream of the vulcanizing means (Figure 1) as disclosed in the present specification (Figure 1). Since the pinch rollers of the present invention pinch and seal the hose, the skilled artisan would appreciate the pinch rollers of Satzler would also pinch and seal the hose.

20. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satzler in view of Borsvold.

Regarding claim 13, the skilled artisan reading the reference as a whole would have appreciated that the type of vulcanizing means is not critical to the invention; therefore, it would have been obvious to the skilled artisan to use a steam drum as an alternative to the bath of Satzler because such is a known vulcanizing means for continuously vulcanizing a rubber hose from the outside-in, as taught by Borsvold (Figure 1; column 1, lines 61-62; column 3, lines 4-11), where only the expected results would have been achieved.

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21. Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satzler in view of Enomoto and Tanaka.

With respect to claim 25, Satzler teaches feeding woven cloth 16 over a tube 96 that extends through a bore of the mandrel 50 (Figure 2; column 4, lines 31-34), extruding rubber onto the woven fabric (column 5, lines 42-47 and 63-66), removing the unvulcanized hose from the mandrel, pulling the hose through a heater 30 to vulcanize the hose (Figure 1), and sealing the vulcanized hose by passing it through pinch rollers 78 as it exits the heater (Figure 1; column 4, line 19; column 5, lines 7-11). The reference is silent as to supplying gas through the cloth, into the tube, and through the mandrel, extruding the rubber into and through the cloth, pressurizing the hose with a gas, sealing the inside of the hose with respect to the mandrel, and sealing the hose as it exits the heater.

It is known in the art to make a hose by feeding woven cloth over a mandrel 11 (column 3, lines 38-49), extruding rubber onto the cloth (column 3, lines 45-47), pressurizing the hose with a gas (column 3, lines 50-52), supplying the gas through the mandrel to the inside of the hose (column 3, lines 50-52), removing the unvulcanized hose from the mandrel (column 3, lines 44-45), pulling the hose a heater 32, and sealing the hose with the mandrel at the rearward end of the hose and clamping means at the forward end (column 5, lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to pressurize the unvulcanized hose of Satzler with a gas and supply the gas through the mandrel of Satzler to the inside of the hose because such is known in the art, as taught by Enomoto, where the gas keeps the hose from collapsing once it is removed from the mandrel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extrude the rubber of Satzler onto, into and through the woven fabric because such is known in the art, as taught by Tanaka (column 7, lines 50-54 and 61-64), where this eliminates the need for two extruders.

The examiner points out that Satzler teaches extruding rubber hose over a mandrel where the extruded rubber exits the mandrel just as disclosed by Applicants in the present specification; therefore, one would appreciate that a seal would be formed just as in the present specification.

The examiner also points out that Satzler teaches drawing the hose through pinch rollers located downstream of the vulcanizing means (Figure 1) as disclosed in the present specification (Figure 1). Since the pinch rollers of the present invention pinch and seal the hose, the skilled artisan would appreciate the pinch rollers of Satzler would also pinch and seal the hose.

Regarding claim 26, it would have been obvious to one of ordinary skill in the art at the time the invention was made to measure the diameter of the hose upon exit from the heater because this would tell you whether or not the diameter of the pressure of the gas needed to be increased or decreased to achieve the desired hose diameter.

Regarding claims 27-28, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supply the gas intermittently in response to the need for more or less gas to increase or decrease the diameter of the hose.

Regarding claim 29, Enomoto teaches supplying the gas through a tube 14 in the mandrel 11 (Figure 2; column 3, lines 50-52; column 5, lines 35-36). Enomoto is silent as to the tube having a check valve, but the skilled artisan would appreciate that Figure 2 depicts the tube

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having a valve where valves are notoriously well-known means for supplying gas. The type of valve would have been within purview of the skilled artisan.

22. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satzler, Enomoto, and Tanaka as applied to claim 26 above, and further in view of Dougherty.

Regarding claim 30, the skilled artisan reading the reference as a whole would have appreciated that the type of vulcanizing means is not critical to the invention; therefore, it would have been obvious to the skilled artisan to use a other vulcanizing means, such as steam heater, microwave heater, etc. as an alternative to the bath of Satzler because such are known vulcanizing means for vulcanizing a rubber hose from the outside-in, as taught by Dougherty (column 8, lines 59-66), where only the expected results would have been achieved.

Allowable Subject Matter

23. Claims 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 19, the prior art fails to teach or suggest a process for making a hose where pressurizing the hose includes intermittently supplying gas under pressure through a gas supply cup, into and through a tube interconnected with the mandrel, and into and through a check valve and into the inside of the hose.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **703-305-5419**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jessica L. Rossi
Patent Examiner
Art Unit 1733



jl
November 26, 2002



Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700